



South Dakota Retirement System

Executive Board of the Legislative Research Council

**SDRS and Cement Plant Retirement Plan
Projected Funded Status
as of June 30, 2011**

August 22, 2011

buckconsultants[®]
A Xerox Company



SDRS Projected Funded Status as of June 30, 2011

Projected Funded Status Includes 2010 Corrective Action

<u>If Investment Return for Year Ending June 30, 2011 is</u>	<u>Actuarial Value Funded Ratio at June 30, 2011⁽¹⁾</u>	<u>Market Value Funded Ratio at June 30, 2011⁽¹⁾</u>	<u>Additional Unfunded Actuarial Accrued Liability as of June 30, 2011⁽¹⁾⁽²⁾</u>	<u>Cushion/(Deficit) As of June 30, 2011⁽¹⁾⁽⁴⁾</u>
22.50%	96%	100%	N/A	298
25.00%	96%	102%	N/A	458
27.50%	96%	104%	N/A	\$ 618
At June 30, 2010	96%	88%	N/A ⁽³⁾	\$ (623)
At June 30, 2009	92%	76%	\$ (355M) ⁽³⁾	\$ (1,130)

⁽¹⁾ Before consideration of liability gains/losses for year ending June 30, 2011.

⁽²⁾ The Actuarial Value of Assets cannot be less than 80% or more than 120% of the Market Value of Assets. If the Actuarial Value reaches 120% of Market Value, the Actuarial Value is decreased and additional Unfunded Liabilities are created.

⁽³⁾ June 30, 2009 Additional Unfunded Accrued Liability was eliminated by enacted corrective actions recognized at June 30, 2010.

⁽⁴⁾ The Cushion is the amount by which the Market Value of Assets exceeds the Actuarial Value of Assets. The Deficit is the amount by which the Market Value of Assets is less than the Actuarial Value of Assets.



SDRS Projected Required Investment Return

Minimum Annual Investment Return Required to Utilize Existing Cushion Over

Includes 2010 Corrective Action

If Investment Return For Year Ending June 30, 2011 is				20-Year Likelihood		Thirty Years
	<u>Five Years</u>	<u>Ten Years</u>	<u>Twenty Years</u>	<u>SDIO Assumptions⁽¹⁾</u>	<u>Current SDRS Assumptions⁽²⁾</u>	
22.50%	6.9%	7.3%	7.5%	48%	54%	7.5%
25.00%	6.4%	7.0%	7.3%	51%	57%	7.4%
27.50%	5.9%	6.8%	7.2%	52%	58%	7.3%

⁽¹⁾ Likelihood of 20-year returns at or above required level, based on June 2010 SDIO capital market assumptions including a mean expected return of 7.37% and a 20-year standard deviation of 2.8%.

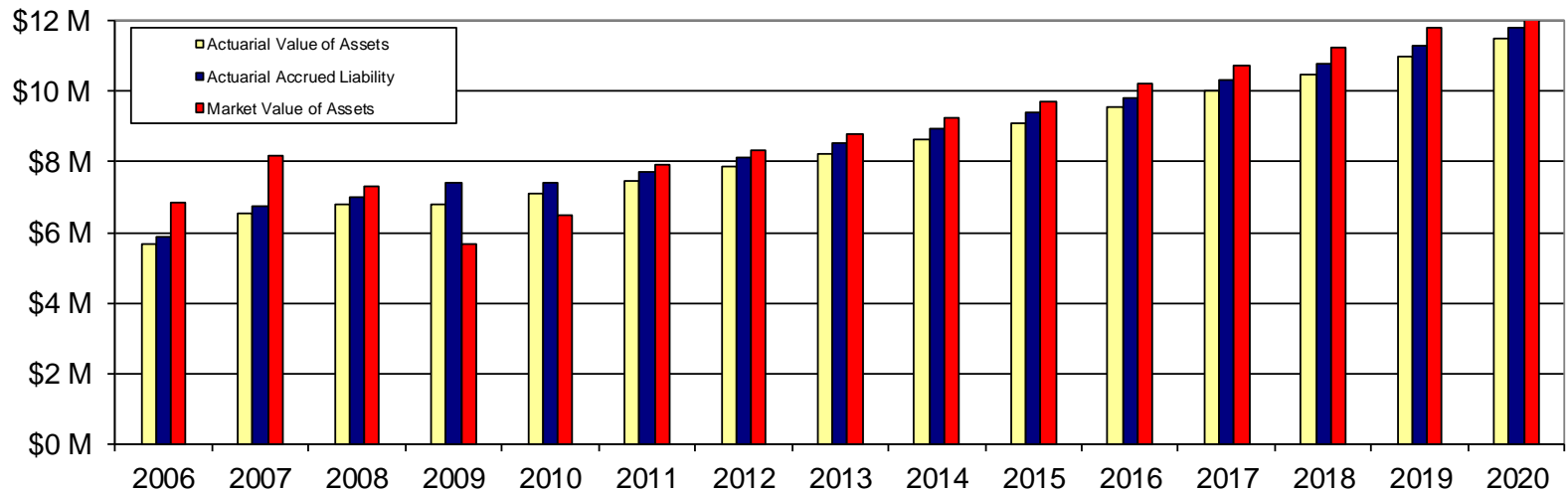
⁽²⁾ Likelihood of 20-year returns at or above required level, based on current SDRS investment return assumption of 7.75% and 20-year standard deviation of 2.69%.



SDRS Funded Status Projection

One Year at 25%, Then 7.75% Annual Return on Market Value of Assets

Includes 2010 Corrective Action



Market Value Funded Ratio	117%	121%	105%	76%	88%	102%	103%	103%	103%	103%	104%	104%	104%	105%	105%
Actuarial Value Funded Ratio	97%	97%	97%	92%	96%	96%	97%	97%	97%	97%	97%	97%	97%	97%	97%
MVA to AVA Ratio	121%	125%	108%	83%	91%	106%	106%	106%	107%	107%	107%	107%	107%	108%	108%
% Actuarially Required Contribution Made	100%	100%	100%	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



Cement Plant Retirement Plan

Projected Funded Status as of June 30, 2011

<u>If Investment Return for Year Ending June 30, 2011 is</u>	<u>Market Value Funded Ratio at June 30, 2011⁽¹⁾</u>	<u>Unfunded Actuarial Accrued Liability as of June 30, 2011⁽¹⁾</u>
20.00%	87%	6.9M
22.50%	89%	5.9M
25.00%	91%	4.9M
<hr/>		
At June 30, 2010	72%	\$ 15.0M
At June 30, 2008	89%	\$ 6.1M

⁽¹⁾ Before consideration of liability gains/losses for year ending June 30, 2011.



Cement Plant Retirement Plan

Projected Required Investment Return

Minimum Annual Investment Return Required to Eliminate Unfunded Actuarial Accrued Liability

If Investment Return For Year Ending June 30, 2011 is	20-Year Likelihood					
	<u>Five Years</u>	<u>Ten Years</u>	<u>Twenty Years</u>	<u>SDIO Assumptions⁽¹⁾</u>	<u>Current SDRS Assumptions⁽²⁾</u>	<u>Thirty Years</u>
20.00%	11.3%	9.9%	9.3%	25%	28%	9.2%
22.50%	10.8%	9.6%	9.0%	28%	32%	8.9%
25.00%	10.2%	9.2%	8.8%	30%	35%	8.7%

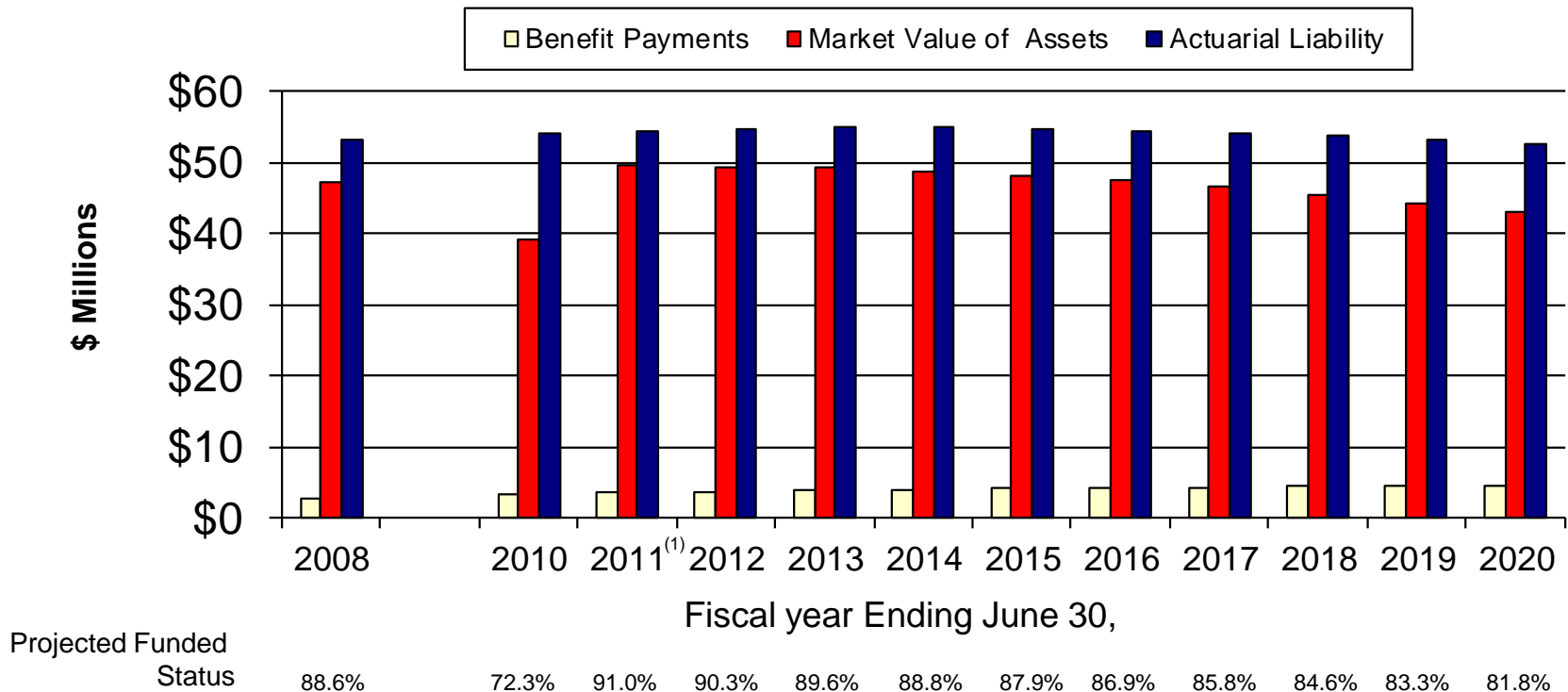
⁽¹⁾ Likelihood of 20-year returns at or above required level, based on June 2010 SDIO capital market assumptions including a mean expected return of 7.37% and a 20-year standard deviation of 2.8%.

⁽²⁾ Likelihood of 20-year returns at or above required level, based on current SDRS investment return assumption of 7.75% and 20-year standard deviation of 2.69%.



Cement Plant Retirement Plan Funded Status Projection

**One Year at 25%, Then
7.75% Annual Return on Market Value of Assets**



⁽¹⁾ Includes additional contribution of approximately \$4 million received in fiscal 2011.